

An Overview of the BC Nursery Industry

The nursery industry in British Columbia is a successful and dynamic sector of the province's horticultural industry. There are no marketing boards, set prices, or quotas to protect local growers against highly competitive domestic or North American trade. Good communication and representation, through industry associations, benefit industry members as they continue to expand the sector to meet the growing consumer demand for ornamental landscape plants.

Demographics

British Columbia is the second largest producer of nursery stock in Canada, accounting for close to one third of national productioni. Statistics Canada estimates that there are approximately 520 commercial nursery businesses of five or more acres in BC, accounting for 3,845 ha (9,500 acres) of nursery production area across the province in 2002ii. In addition, there are also numerous smaller nursery businesses. The major production areas are concentrated in the Lower Mainland and Okanagan regions and on Vancouver Island. These areas enjoy some of the lowest production costs in Canada because of minimal over-wintering requirements, maximum growing season length and, the availability of abundant supplies of good-quality water.

BC nursery businesses range in size from small one-person operations to highly mechanized organizations with numerous full-time and seasonal staff and several hundred acres of field and/or container growing areas. Some nursery businesses are entirely wholesale grower operations, while others may specialize in the retail market, or have both retail and wholesale divisions. The industry employs approximately 1,500 full-time and 2,300 part-time workers, with an annual payroll of \$44,175,000ii.

The BC nursery industry has experienced steady growth since 1992 in both acreage under production (see Figure 1) and sales (see Figure 2). Land area under nursery production in the province increased by 36% between 1992 and 2002. Sales have grown from \$79,027,000 in 1992, to \$152,330,000 in 2002, an increase of 93% over the ten yearsii. In 2001, nursery export sales reached almost \$74 million, an increase of 270% since 1998 (see Figure 3).

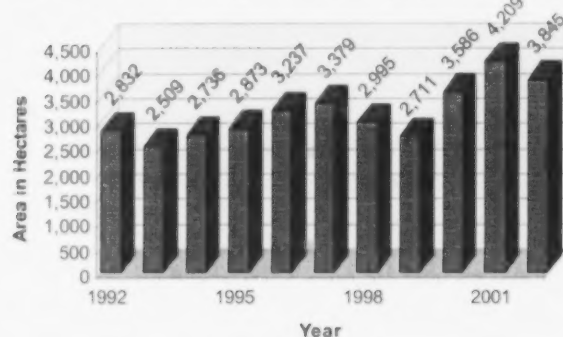
FACTSHEET



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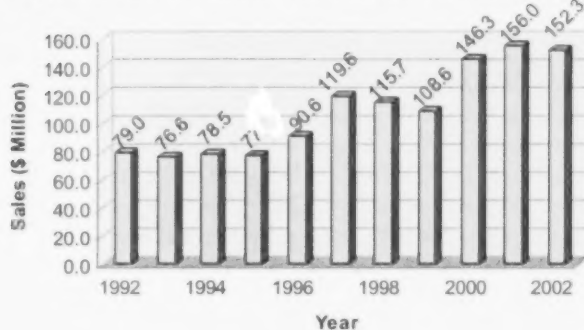
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Figure 1: BC Nursery Land Area* (ha), 1992-2002

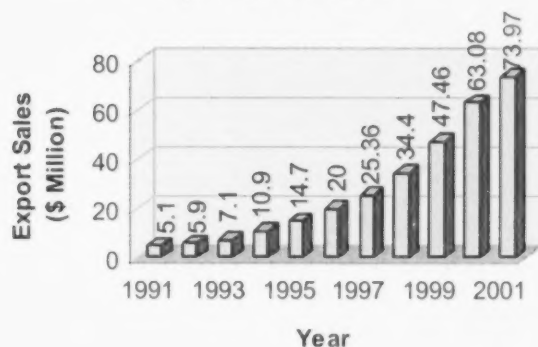
Source: Statistics Canada, Catalogue 22-202.

*nurseries of 5 acres or more.

1 ha = 2.471 acres.

Figure 2: BC Wholesale Nursery Sales, 1992-2002

Source: Statistics Canada Catalogue 22-202.

Figure 3: Growth of BC Nursery Exports, 1991-2001

Source: BC Statistics Trade Data.

The Nursery Industry Across Canada

The Canadian nursery industry has seen significant increases in sales over the past several years, despite a decline in nursery area across the nationⁱⁱ. In 2002, nursery sales in Canada were \$517.1 million, a 15% increase over the previous year. Nursery land area declined by 3% over the previous year, to 23,450 hectares (57,945 acres). These figures represent a trend toward increased imports and purchases for resale by nurseries and, a decline in purchases for growing-on. This is also a reflection of the shift to increased container production where more intensive crop production per acre results in greater returns per area than field production.

Nursery sales across Canada are shown in Table 1. The main nursery areas are in Ontario, which accounts for 48% of total sales, and British Columbia, with 30%. Quebec has the third largest nursery sales in the country, accounting for 11% of total salesⁱⁱ.

Table 1: The Canadian Nursery Industry, 2002

Province	Sales	Production Area (ha*)
Atlantic Provinces	10,312,700	530
Quebec	57,750,000	3,925
Ontario	245,441,500	10,319
Prairie Provinces	51,283,500	5,180
British Columbia	152,330,000	4,209
Canada Total	517,117,700	24,164

Source: Statistics Canada Catalogue 22-202.

*1 ha = 2.471 acres.

Markets

The market for BC nursery stock is diverse; it encompasses wholesale, retail, and direct farm marketing. Table 2 examines the major market sectors. A large proportion of products are sold to markets outside the province, mostly to the Pacific Northwest region of the United States, the prairie provinces and Ontarioⁱⁱⁱ.

Table 2: BC Nursery Markets

Market	Sales (\$'000)	Percent of Total
Grower Retail Sales	19,265	13%
Fruit Growers	3,703	2%
Landscape Contractors	16,512	11%
Garden Centres	31,512	21%
Mass Merchandisers	11,828	8%
Other Growers	21,754	14%
Other Channels	47,756	31%
Total Sales	152,330	

Source: Statistics Canada Catalogue 22-202

The export market for nursery products is strong. Canada's primary trading partner in the nursery industry is the United States. According to the USDA, Canadian nursery products account for 50% of all nursery imports into the US, with a value of over US\$298 million, in 2002^{iv}. Although highly significant to the Canadian nursery industry, these figures represent a mere 3.3% of the total US consumption of nursery products^{iv}.

The US is the world's largest consumer and producer of nursery products^v; however, in recent years, US nursery production has declined, despite increasing demand. Meanwhile, nursery imports in the US have increased, fuelled by the strong US dollar. This indicates that the US has the potential to be a lucrative and growing market for Canadian nursery products. Canada's proximity to the US and, a currency exchange advantage place Canadian nursery growers in a strong position to take advantage of this opportunity; although, changes in the value of the Canadian or US dollar could have a significant impact on this advantage.

Canada is a net exporter of nursery and tree products^{vi}. In 2002, exports totaled \$417 million, nearly twice the value of imports, which were \$210 million. Ontario is the primary exporting province, accounting for 62% of total nursery exports, British Columbia is the second largest exporter, followed by Quebec. Together, these three provinces represent 90% of Canadian nursery exports^{vi}.

Industry Associations

There is a network of agricultural industry associations which provide various forms of representation for the BC nursery industry.

BC Landscape & Nursery Association – The BCLNA has nearly 600 members, representing three commodities: wholesale nursery, retail nursery/garden centre, and landscape professionals. It also includes as members, the industry's educators, suppliers, consultants and affiliated government agencies.

The Association was formed in 1953 and is, today, a strong organization, providing a forum for companies with shared interests and concerns to work together on local, regional and provincial issues. Regular meetings are held at member businesses to share information and address issues in the areas of production, pest management, marketing and trade.

Canadian Nursery Landscape Association – Individual companies can join the CNLA only by becoming a member of the BCLNA. The CNLA, which counts as members all the provincial associations, represents the nursery industry on all national issues. It also provides a wide range of membership benefits.

BC Agriculture Council

The British Columbia Agriculture Council (BCAC) provides leadership in representing, promoting, and advocating the collective interests of all agricultural producers in the province. The Council fosters cooperation and a collective response to matters affecting the future of agriculture in the province, such as environmental and labour issues, and facilitates programs that benefit the industry.

Crop Production

Nursery crops include a diverse range of several thousand genera of ornamental plants. They can be divided into eleven distinct categories: upright evergreens, deciduous trees, broadleaf evergreens, spreading evergreens, deciduous shrubs, herbaceous perennials, vines and groundcovers, tree fruits, roses, native plants and aquatic plants. Growers may propagate their own stock or purchase 'liners' from other nurseries to grow on and resell.

There are three types of nursery production systems:

- Container Production
 - Plants are grown in containers ranging in size from liners (e.g. multi-cell plug trays and 7 to 15 cm pots) to larger pots (1 to 5 gallon) and tubs (7 to 20 gallon).
 - More intensive production per acre is possible with greater returns per area than field production.
 - Mechanization is possible for large operations.
 - Preferred by customers, easily harvested and marketed year round.
- Field Production
 - Balled stock
 - Plants are harvested with soil around the roots. Traditionally, the rootball was wrapped in burlap (balled and burlapped or, b&b), although today, wire baskets and mesh bags are also used.
 - The removal of soil from the field requires good soil replenishment practices.
 - Larger specimen trees are usually balled.
 - Bare root
 - Plants are harvested, shipped and sold without soil around the roots.
 - Fruit trees and a wide array of deciduous and coniferous trees are commonly produced bare root.
 - Plants are dug in the fall, graded, and stored, either in coolers or outdoor sawdust beds.
- Pot-In-Pot Production
 - Plants are grown in containers that are placed into pots sunken into the ground.
 - Provides good protection from winter damage and eliminates wind throw of containers.
 - Easily harvested and marketed year round.

Production systems in BC represent the trend across North America toward increasing container production, with field production remaining stable. Pot-in-pot production is increasing in popularity.

The BC Landscape Standard establishes size and quality guidelines for growers and landscape professionals. The Standard specifies minimum root/plant size relationships for nursery stock. Root size should be equal to the container size or, rootball size of balled plants. Above-ground growth is measured by trunk caliper, plant height, canopy density and shape (height and spread ratio).

Economics

Nursery crops are attractive to new growers due to the small land base and minimal capital investment required, relative to other sectors of horticulture.

Capital costs, input and labour expenses and, returns vary considerably depending on the type of crop grown. There are major differences in the proportion of direct expenses attributed to crop supplies and labour, with liner crops requiring significantly higher labour and less crop supplies, relative to #1 containers and balled stock^{vii}. There are also differences in the returns and capital costs. Liner crops have higher returns per unit area, higher costs for buildings & machinery, and smaller land requirements, relative to #1 (1 gallon) or larger pots and, field-grown caliper stock. The major capital cost with liner production is the propagation greenhouse, whereas for container and field-grown stock it is tractors and associated equipment^{viii}.

A 2002 industry survey of nursery growers, conducted by the BCLNA, concluded that "operations with 80% or more acres in field production return median sales of about \$9,000 per acre. Operations with 80% or more acres in container and/or greenhouse/polyhouse production return median sales of about \$140,000 per acre. Operations with no field production at all return median sales of about \$155,000 per acre."^{ix}

The economic principles of supply and demand are very important to nursery operators because of the speculative nature of nursery stock sales^x. Returns can be adversely affected by downturns in the economy that slow housing starts, poor spring weather resulting in a change in consumer buying patterns and, oversupply of some crops. Nurseries often cannot quickly adjust production levels in response to changes in demand, since it can take up to 4 years for a crop to reach a marketable size.

Refer to the BCMAFF *Planning for Profit – Enterprise Budgets* for a more detailed examination of production costs and contribution margins of specific crops.

Industry Challenges

Supply and demand

Demand for specific nursery crops may change faster than growers' ability to adapt, due to the long production period of many nursery crops.

Relatively easy entry into nursery production significantly affects the volume of product available. Some growers market solely on price, which can depress crop prices.

High land values

The main nursery production areas have some of the highest land costs in the province.

Labour shortage

The industry has a shortage of unskilled labour and middle management. Horticulture programs offered at the province's universities and colleges provide skilled graduates and hope of alleviating the shortage. Growers also look to Europe for trained managers.

Environment stewardship

Environmental regulations dealing with nutrient management, irrigation and soil preservation are becoming stricter. In Ontario and several US states, regulations regarding fertilizer run-off requires growers to install costly systems to recover and recirculate irrigation/nutrient solutions. It is anticipated that similar requirements will be introduced in British Columbia.

Fewer pest controls

The United States and Europe have several new, effective pesticides that are not registered in Canada. Large pesticide companies are hesitant to spend the resources needed for Canadian registration, due to the small size of the Canadian market. Often these new pesticides are less harmful to the environment and to biological pest controls. The decreasing effectiveness and reduced number of registered pesticides places more emphasis on integrated pest management (IPM) practices. Several biological controls such as beneficial fungi that are available in other countries are also not available to Canadian nursery growers due to the long and stringent process of Canadian registration.

Quarantine pests

The introduction of a quarantine pest could be devastating to the industry. The detection of a quarantine pest at a nursery can result in substantial economic hardship for individual growers and regions. Destruction of crops, at growers' expense, may be required if infestation with a quarantine pest is confirmed or suspected. Market opportunities may also be lost, as a result of restrictions on plant movements.

Lack of local research

Research at public institutions has traditionally focused on food crops rather than ornamentals.

Opportunities and Strengths**Climate**

The main nursery production areas of BC have some of the mildest climatic conditions in Canada, providing the advantage of a longer growing season and minimal winter cold protection requirements over other areas of Canada.

Co-operation between growers

Growers frequently meet at BCLNA study sessions to discuss new developments and issues of concern regarding production, pest and disease control, marketing, trade, regulations and environmental issues. Most growers realize that higher over-all standards of the industry benefit everyone.

Plant breeding programs

New plant introductions by the Plant Introduction Scheme of the Botanical Garden (PISBG) located at the University of BC, and by individual nurseries, put BC at the forefront of ornamental horticulture worldwide. New plant cultivars are being continually introduced and offer potential for high value crops. The Canadian Ornamental Plant Foundation encourages plant breeding and the development of new plants for the benefit of the entire horticulture industry.

Support and representation from industry associations

The BC Landscape and Nursery Association and the Canadian Nursery Landscape Association address issues and problems faced by nursery growers. Industry associations also foster high standards and communication between growers, landscapers and nursery retailers.

New technology

Research programs develop beneficial organisms, e.g. fungi and insects to overcome pest and disease problems.

Computer technology increases marketing opportunities improves production efficiency and, aids in production knowledge and industry communication.

Increasing use of automated systems reduces production costs.

Opportunities exist for advancements in more efficient use of resources, e.g. collection, sterilization and recirculation of irrigation water.

Increasing demand

Sales of nursery crops are increasing steadily. Strong housing starts and increased interest in gardening are likely contributing factors". Gardening is the number one pastime of North Americans and predictions of continued growth in gardening are good news for the industry.

Pacific Rim trade

BC's close proximity to, and the many direct flights to, several Asian countries has potential for increased trade of nursery products; however, they are difficult markets to penetrate due to volume and quality demands.

Contacts

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Associations/Societies:

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Canadian Christmas Tree Growers' Association

P.O. Box 996, Station "B"

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Canadian Horticultural Council

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Website: <http://hortcouncil.ca/>

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Further Reading

- *Starting a Nursery Business in BC*, available from the BCLNA
- *Nursery and Landscape Pest Management and Production Guide*, available from the BCLNA
- *Planning for Profit – Enterprise Budgets* for specific ornamental crops, available from BCMAFF

Websites

- **InfoBasket** – A portal to agricultural information on the internet. Click on Ornamentals under the list of Communities for links to numerous websites on nursery production, business management, marketing & trade, regulations, directories, statistics and data.
<http://infobasket.gov.bc.ca>
- See **Contacts** for websites of government and industry associations.

References

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⁴ Floriculture and Nursery Crops Situation and Outlook Yearbook, (2003). Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture. Available online:
<http://www.ers.usda.gov/publications/flo/Jun03/FLO2003.pdf>

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⁶ Industry Canada, Trade Data Online. Available online: http://strategis.ic.gc.ca/sc_mrkti/tdct/engdoc/tr_homep.html

⁷ Woodske, D. (1999). *Starting a Nursery Business in BC*. Abbotsford, BC: British Columbia Ministry of Agriculture, Fisheries & Food.

